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The Effects of Square-Stepping Exercise on Risk of Falling and Balance in Senior Adults

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Presenters

Grace A. Miorelli, Michaela Nelson, Elizabeth A. Sled, Benjamin T. Massa, Mackenzi J. Clemens, Hope E. McColl, and April D. Crommett



Research & Scholarship SYMPOSIUM

The Effects of Square-Stepping Exercise on Risk of Falling and Balance in Senior Adults

Eleven adults over the age of 60 and involved in the Senior Jacket program at Cedarville University participated in this 10-week study (0 males, 11 females; mean age=76). Measurements taken prior to and after the intervention included the Activities-specific Balance Confidence (ABC) Scale, Timed-Up-And-Go Test, 30-Second Chair Stand Test, and the Biodex Balance System's Limits of Stability Test and Fall Risk Test. A repeated measures ANOVA was used to compare the initial and final measures. Results of the study showed a significant improvement from pretest to posttest for the Timed-Up-and-Go Test and the 30-Second Chair Stand Test. There was no significant change from pretest to posttest for the Limits of Stability test, the Fall Risk test or scores on the ABC Scale. Overall, the results showed that the participants significantly benefited from the training program in areas of functional fitness. Unfortunately, there was no significant improvement with the Fall Risk Test or Limits of Stability Test.